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Substitute for Form 1449A/PTO				Complete If Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Application Number	10/010,114
				Filing Date	November 13, 2000
				First Named Inventor	Raymond H. Boutin
				Group Art Unit	1632
				Examiner Name	D. Crouch
Sheet	1	of	14	Attorney Docket Number	AHPICUSA

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
de	AA	5,108,921	B1	P. Low	04/28/1992	
	AB	5,166,320	B1	G. Wu	11/24/1992	
	AC	5,171,678	B1	J. Behr	12/15/1992	
	AD	5,283,185	B1	R. Eband	02/01/1994	
de	AE	5,614,503	B1	N. Chaudhary	03/25/1997	

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		Office ³	Number ⁴	Kind Code ² (if known)				
	AL	WO	WO86/00930	A1	H. Robinson	02/13/1986		
	AM	WO	WO90/11092	A1	P. Felgner	10/04/1990		
	AN	WO	WO90/12095	A1	P. Low	10/18/1990		
	AO	WO	WO90/12096	A1	P. Low	10/18/1990		
	AP	WO	WO91/16024	A1	P. Felgner	10/31/1991		
	AQ	WO	WO92/06180	A1	G. Wu	04/16/1992		

Examiner Signature	<i>Deborah Crouch</i>	Date Considered	4/26/05
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¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

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<i>de</i>	AF	5,650,096	B1	D. Harris	07/22/1997	
	AG	5,719,131	B1	D. Harris	02/17/1998	
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	AI	5,767,099	B1	D. Harris	06/16/1998	
<i>de</i>	AJ	5,783,565	B1	C. Siegel	07/21/1998	

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A	AAL	WO	WO93/19768	A1	F. Szoka	10/14/1993		
de	AAM	WO	WO93/24640	A1	R. Debs	12/09/1993		

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AK	AK	5,840,710	B1	E. Lee	11/24/1998	
AAA	AAA	5,910,487	B1	N. Yew	06/08/1999	
AAB	AAB	5,912,239	B1	C. Siegel	06/15/1999	
AAC	AAC	5,925,628	B1	E. Lee	07/20/1999	
AAD	AAD	5,935,936	B1	A. Fasbender	08/19/1999	

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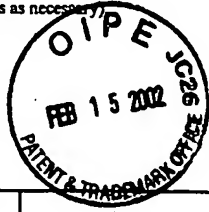
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<i>JS</i>	AAE	5,942,634	B1	C. Siegel	08/24/1999	
<i>J</i>	AAF	5,948,767	B1	R. Scheule	09/07/1999	
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de	AR	P. ATANASIU et al, "Virologie - Production de tumeurs chez le Hamster par inoculation d'acide desoxyribonucleique extrait de cultures de tissus infectees par le virus du polyome", Academie des Sciences (Paris), 254:4228-4230 (1962)		
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	AV	J-P. BEHR, Gene Transfer with Synthetic Cationic Amphiphiles: Prospects for Gene Therapy", Bioconjugate Chem., 5:382-389 (1994)		
	AW	P. BERMAN, "Efficacy of Recombinant Glycoprotein D Subunit Vaccines on the Development of Primary, Recurrent, and Latent Genital Infections with Herpes Simplex Virus Type 2 in Guinea Pigs", J. Infect. Dis., 157(5):897-902 (May, 1988)		
	AX	C. BENNETT et al, "Cationic Lipids Enhance Cellular Uptake and Activity of Phosphorothioate Antisense Oligonucleotides", Molecular Pharmacology, 41:1023-1033 (1992)		
de	AY	H. BLAU et al, "Molecular Medicine, Gene Therapy - A Novel Form of Drug Delivery", New Engl. J. Med., 333(18):1204-1207 (November 2, 1995)		
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		Group Art Unit	1632		
		Examiner Name	D. Crouch		
Sheet	6	of	14	Attorney Docket Number	AHP1CUSA



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OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
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dc	AZ	J. BODMER et al, "Carrier Potential of Glycoproteins", Methods in Enzymology, 112:298-306 (1985)	
	AAR	E. BONFILS et al, "Uptake by Macrophages of a Biotinylated Oligo- α -deoxythymidylate by Using Mannosylated Streptavidin", Bioconj. Chem., 3:277-284 (1992)	
	AAS	E. BONFILS et al, "Drug Targeting: Synthesis and Endocytosis of Oligonucleotide-Neoglycoprotein Conjugates", Nucleic Acids Research, 20(17):4621-4629 (1992)	
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	AAU	C-J. CHU et al, "Efficiency of Cytoplasmic Delivery by pH-Sensitive Liposomes to Cells in Culture", Pharmaceutical Research, 7(8):824-834 (1990)	
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dc	AAX	C. CONNELLY et al, "Polyamines Eliminate an Extreme Size Bias Against Transformation of Large Yeast Artificial Chromosome DNA", Genomics, 10:10-16 (1991)	
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<i>de</i>	AAV	M. COTTEN et al, "High-Efficiency Receptor-Mediated Delivery of Small and Large 48 kilobase Gene Constructs Using the Endosome-Disruption Activity of Defective or Chemically Inactivated Adenovirus Particles", Proc. Natl. Acad. Sci. USA, 89:6094-6098 (July, 1992)		
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	BR	S. EDGINGTON, "Ribozymes: Stop Making Sense", Biotechnology, 10:256-262 (March, 1992)		
	BS	M. ELOFSSON et al, "Solid-Phase Synthesis and Conformational Studies of Glycosylated Derivatives of Helper-T-Cell Immunogenic Peptides from hen-egg Lysozyme", Carbohydrate Research, 246:89-103 (1993)		
	BT	J. FELGNER et al, "Enhanced Gene Delivery and Mechanism Studies with a Novel Series of Cationic Lipid Formulations", J. Biol. Chem., 269(4):2550-2561 (January, 1994)		
	BU	P. FELGNER et al, "Cationic Liposome-Mediated Transfection", Nature, 337:387-388 (January, 1989)		
	BV	L. GAO et al, "Direct In Vivo Gene Transfer to Airway Epithelium Employing Adenovirus-Polylysine-DNA Complexes", Human Gene Therapy, 4:17-24 (1993)		
	BW	H. GERSHON et al, "Mode of Formation and Structural Features of DNA-Cationic Liposome Complexes Used for Transfection", Biochemistry, 32:7143-7151 (1993)		
<i>de</i>	BX	J. HAENSLER et al, "Polyamidoamine Cascade Polymers Mediate Efficient Transfection of Cells in Culture", Bioconjugate Chem., 4:372-379 (1993)		
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de	BY	J. HAENSLER et al, "Synthesis and Characterization of a Trigalactosylated Bisacridine Compound to Target DNA to Hepatocytes", Bioconjugate Chem., 4:85-93 (1993)	
	BZ	M. HOWELL et al, "Limited T-Cell Receptor β -chain Heterogeneity Among Interleukin 2 Receptor-Positive Synovial T Cells Suggests a Role for Superantigen in Rheumatoid Arthritis", Proc. Natl. Acad. Sci. USA, 88:10921-10925 (December, 1991)	
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	BBS	M. ISRAEL et al, "Biological Activity of Polyoma Viral DNA in Mice and Hamsters", J. Virol., 29:990-996 (March, 1979)	
	BBT	J. JONES et al, "Cell Fusion Induced by the Murine Leukemia Virus Envelope Glycoprotein", J. Virol., 67(1):67-74 (January, 1993)	
	BBU	R. JULIANO et al, "Interaction of Polynucleotides with Cultured Mammalian Cells", Experimental Cell Research, 73:3-12 (1972)	
	BBV	A. KABANOV et al, "Efficient Transformation of Mammalian Cells Using DNA Interpolyelectrolyte Complexes with Carbon Chain Polycations", Bioconjugate Chem., 4:448-454 (1993)	
de	BBW	KABAT et al, "1987 Sequence of Proteins of Immunological Interest U.S. Department of Health and Human Services", Bethesda, MD	
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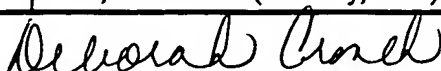
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de	BBX	K. KAWAGUCHI et al, "Differential Uptake of D-Glucosyl-neoglycoproteins by Isolated Rat Hepatocytes", J. Biol. Chem., 256(5):2230-2234 (March, 1981)	
	BBY	K. KONO et al, "Fusion Activity of an Amphiphilic Polypeptide Having Acidic Amino Acid Residues: Generation of Fusion Activity by α -helix Formation and Charge Neutralization", Biochimica et Biophysica Acta., 1164:81-90 (1993)	
	BBZ	C. LEAMON et al, "Delivery of Macromolecules into Living Cells: A Method that Exploits Folate Receptor Endocytosis", Proc. Natl. Acad. Sci. USA, 88:5572-5576 (July, 1991)	
	CR	J. LEAR et al, "Membrane Binding and Conformation Properties of Peptides Representing the NH ₂ Terminus of Influenza HA-2", J. Biol. Chem., 262(14):6500-6505 (May, 1987)	
	CS	Y. LEE, "Synthesis of Some Cluster Glycosides Suitable for Attachment to Proteins or Solid Matrices", Carbohydrate Research, 67:509-514 (1978)	
	CT	Y. LEE et al, "Binding of Synthetic Oligosaccharides to the Hepatic Gal/GalNAc Lectin", J. Biol. Chem., 258(1):199-202 (January, 1983)	
	CU	J-Y. LEGENDRE et al, "Delivery of Plasmid DNA into Mammalian Cell Lines Using pH-Sensitive Liposomes: Comparison with Cationic Liposomes", Pharmaceutical Research, 9(10):1235-1242 (1992)	
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<i>de</i>	CW	R. LEVENTIS et al, "Interactions of Mammalian Cells with Lipid Dispersions Containing Novel Metabolizable Cationic Amphiphiles", Biochimica et Biophysica Acta., 1023:124-132 (1990)		
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	CCT	P. MIDOUX et al, "Specific Gene Transfer Mediated by Lactosylated Poly-L-Lysine into Hepatoma Cells", Nucleic Acids Research, 21(4):871-878 (1993)		
	CCU	R. MULLIGAN, "The Basic Science of Gene Therapy", Science, 260:926-932 (May, 1993)		
<i>de</i>	CCV	S. NAGARAJAN et al, "Chemistry of Naturally Occurring Polyamines. 9. Synthesis of Spermidine and Spermine Photoaffinity Labeling Reagents", J. Org. Chem., 50(26):5735-5737 (1985)		
Examiner Signature	<i>Deborah Crouch</i>		Date Considered	<i>4-26-05</i>

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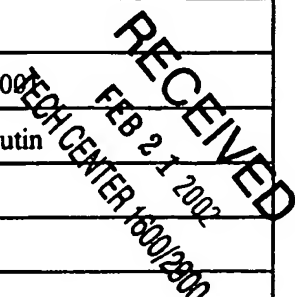
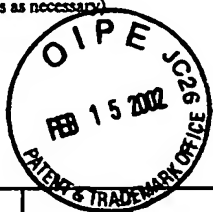
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			Application Number	10/010,114	
			Filing Date	November 13, 2001	
			First Named Inventor	Raymond H. Boutin	
			Group Art Unit	1632	
			Examiner Name	D. Crouch	
Sheet	11	of	14	Attorney Docket Number	AHP1CUSA



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dl	CCW	J. NIEVA et al, "Interaction of the HIV-1 Fusion Peptide with Phospholipid Vesicles: Different Structural Requirements for Fusion and Leakage", Biochemistry, 33:3201-3209 (1994)		
	CCX	J. OKSENBERG et al, "Limited Heterogeneity of Rearranged T-Cell Receptor Vα Transcripts in Brains of Multiple Sclerosis Patients", Nature, 345:344-346 (May, 1990)		
	CCY	S. ORKIN et al, "Report and Recommendations of the Panel to Assess the NIH Investment in Research on Gene Therapy", NIH Review Panel on Gene Therapy, (December 7, 1995)		
	CCZ	A. OSOL, Remington's Pharmaceutical Sciences		
	DR	X. PALIARD et al, "Evidence for the Effects of a Superantigen in Rheumatoid Arthritis", Science, 253:325-329 (July, 1991)		
	DS	G. PAOLELLA et al, "Nuclease Resistant Ribozymes with High Catalytic Activity", EMBO J., 11(5):1913-1919 (1992)		
	DT	J. PERALES et al, "Gene Transfer in vivo: Sustained Expression and Regulation of Genes Introduced into the Liver by Receptor-Targeted Uptake", Proc. Natl. Acad. Sci. USA, 91:4086-4090 (April, 1994)		
	DU	P. PINNADUWAGE et al, "A Positively Charged Liposome Used for the Efficient Delivery of DNA to Mouse L-Cells, an Alternative to Lipofectin", Biophysical Journal, 55:341a (1989) Abstract No. Tu-Pos232		
dl	DV	C. PLANK et al, "Gene Transfer into Hepatocytes Using Asialoglycoprotein Receptor Mediated Endocytosis of DNA Complexed with an Artificial Tetra-Antennary Galactose Ligand", Bioconjugate Chem., 3:533-539 (1992)		
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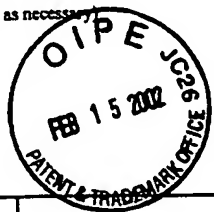
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			First Named Inventor	Raymond H. Boutin	
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de	DW	G. PLUM et al, "Condensation of DNA by Trivalent Cations. 2. Effects of Cation Structure", Biopolymers, 30:631-643 (1990)		
	DX	J. ROSE et al, "A New Cationic Liposome Reagent Mediating Nearly Quantitative Transfection of Animal Cells", BioTechniques, 10(4):520-525 (1991)		
	DY	J. SAMBROOK et al, "Molecular Cloning: A Laboratory Manual", Cold Spring Harbor (1989)		
	DZ	R. SCHLEGEL et al, "A Synthetic Peptide Corresponding to the NH ₂ Terminus of Vesicular Stomatitis Virus Glycoprotein is a pH-Dependent Hemolysin", J. Biol. Chem., 259(8):4691-4694 (April, 1984)		
	DDR	N. SCHMID et al, "Location of Spermine and Other Polyamines on DNA as Revealed by Photoaffinity Cleavage with Polyaminobenzenediazonium Salts", Biochemistry, 30:4357-4361 (1991)		
	DDS	J. SMITH et al, "Liposomes as Agents of DNA Transfer", Biochimica et Biophysica Acta., 1154:327-340 (1993)		
	DDT	S. SOUKCHAREUN et al, "Preparation and Characterization of Antisense Oligonucleotide-Peptide Hybrids Containing Viral Fusion Peptides", Bioconjugate Chem., 6:43-53 (1995)		
	DDU	L. STAMATATOS et al, "Interactions of Cationic Lipid Vesicles with Negatively Charged Phospholipid Vesicles and Biological Membranes", Biochemistry, 27:3917-3925 (1988)		
de	DDV	N. SUBBARAO et al, "pH-Dependent Bilayer Destabilization by an Amphipathic Peptide", Biochemistry, 26:2964-2972 (1987)		
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de	DDW	V. Trubetskoy et al, "Use of N-Terminal Modified Poly(L-Lysine)-Antibody Conjugate as a Carrier for Targeted Gene Delivery of Mouse Lung Endothelial Cells", Bioconjugate Chem., 3:323-327 (1992)	
	DDX	E. WAGNER et al, "Transferrin-Polycation Conjugates as Carriers for DNA Uptake into Cells", Proc. Natl. Acad. Sci. USA, 87:3410-3414 (May, 1990)	
	DDY	E. WAGNER et al, "Coupling of Adenovirus to Transferrin-Polylysine/DNA Complexes Greatly Enhances Receptor-Mediated Gene Delivery and Expression of Transfected Genes", Proc. Natl. Acad. Sci. USA, 89:6099-6103 (July, 1992)	
	DDZ	E. WAGNER et al, "Influenza Virus Hemagglutinin HA-2 N-Terminal Fusogenic Peptides Augment Gene Transfer by Transferrin-Polylysine-DNA Complexes: Toward a Synthetic Virus-Like Gene-Transfer Vehicle", Proc. Natl. Acad. Sci. USA, 89:7934-7938 (September, 1992)	
	ER	J. WHITE et al, "Membrane Fusion Proteins of Enveloped Animal Viruses", Quarterly Review of Biophysics, 16(2):151-195 (1983)	
	ES	J. WHITE, "Membrane Fusion", Science, 258:917-924 (November, 1992)	
	ET	H. WILL et al, "Cloned HBV DNA Causes Hepatitis in Chimpanzees", Nature, 299:740-742 (October, 1982)	
	EU	W. WILLIAMS et al, "Restricted Heterogeneity of T Cell Receptor Transcripts in Rheumatoid Synovium", J. Clin. Invest., 90:326-333 (August, 1992)	
de	EV	J. WILSON et al, "A Novel Mechanism for Achieving Transgene Persistence in Vivo After Somatic Gene Transfer into Hepatocytes", J. Biol. Chem., 267(16):11483-11489 (June, 1992)	
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dc	EW	S. WOOD et al, "A Novel Method for the Incorporation of Glycoprotein-Derived Oligosaccharides into Neoglycopeptides", Bioconjugate Chem., 3:391-396 (1992)		
	EX	G. WU et al, "Evidence for Targeted Gene Delivery to Hep G2 Hepatoma Cells in Vitro", Biochemistry, 27:887-892 (1988)		
	EY	G. WU et al, "Receptor-Mediated Gene Delivery and Expression in Vivo", J. Biol. Chem., 263(29):14621-14624 (October, 1988)		
	EZ	K. WUCHERPFENNIG et al, "Shared Human T Cell Receptor Vβ Usage to Immunodominant Regions of Myelin Basic Protein", Science, 248:1016-1019 (May, 1990)		
	EER	P. YEAGLE et al, "Effects of the 'Fusion Peptide' from Measles Virus on the Structure of N-methyl Dioleoylphosphatidylethanolamine Membranes and Their Fusion with Sendai Virus", Biochimica et Biophysica Acta., 1065:49-53 (1991)		
	EES	K. YOSHIMURA et al, "Adenovirus-Mediated Augmentation of Cell Transfection with Unmodified Plasmid Vectors", J. Biol. Chem., 268(4):2300-2303 (February, 1993)		
	EET	J. ZABNER et al, "Cellular and Molecular Barriers to Gene Transfer by a Cationic Lipid", J. Biol. Chem., 270(32):18997-19007 (August, 1995)		
	EEU	M. ZENKE et al, "Receptor-Mediated Endocytosis of Transferrin-Polycation Conjugates: An Efficient Way to Introduce DNA into Hematopoietic Cells", Proc. Natl. Acad. Sci. USA, 87:3655-3659 (May, 1990)		
dc	EEV	X. ZHOU et al, "DNA Transfection Mediated by Cationic Liposomes Containing Lipopolylysine: Characterization and Mechanism of Action, Biochimica et Biophysica Acta., 1189:195-203 (1994)		
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